

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number
WO 2003/106867 A3

(51) International Patent Classification⁷: **F16H 61/12, 59/68**

(21) International Application Number:
PCT/EP2003/006422

(22) International Filing Date: 18 June 2003 (18.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0213937.6 18 June 2002 (18.06.2002) GB

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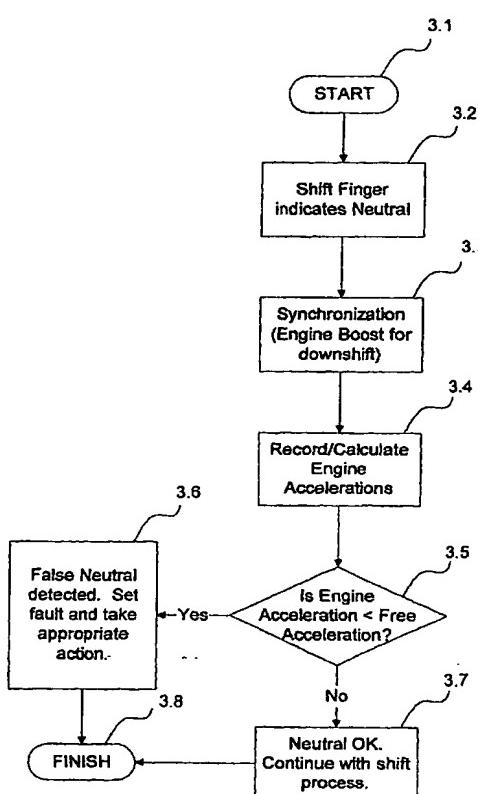
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

{Continued on next page}

(54) Title: METHOD OF DETECTING FALSE NEUTRAL IN AN AUTOMATED TRANSMISSION SYSTEM



(57) Abstract: A method and system for controlling downshifting in an automated mechanical transmission system utilized on a vehicle. When an automatic power downshift from a currently engaged ratio is required, the engine acceleration is monitored and compared with an engine free acceleration to detect a false Neutral condition and to take appropriate action accordingly. Alternatively, a false Neutral condition is detected when the Absolute Value of the rotational speed of the output shaft times the currently engaged gear ratio minus the rotational speed of the input shaft is less than a predetermined value ($\text{ABS}((\text{OS} * \text{GR}) - \text{IS}))$.



SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:
18 March 2004

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No. 005178
PCT/EP 03/06422

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F16H61/12 F16H59/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	EP 0 242 086 A (EATON CORP) 21 October 1987 (1987-10-21) column 3, line 31 - line 36 column 7, line 49 -column 8, line 27 column 9 -column 11 figures 3A,3B	9-11
A	---	1-8
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	-/-	

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Patent family members are listed in annex.

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Date of the actual completion of the international search

12 December 2003

Date of mailing of the international search report

19/12/2003

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/06422

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